



Hurricanes Ida and Nicholas | Update #20 - FINAL

REPORT TIME & DATE: 12:00 PM EDT | Thursday, September 23, 2021

REPORT DISTRIBUTION: Public

This will be the final regularly scheduled DOE update on Hurricanes Ida and Nicholas.

EXECUTIVE SUMMARY

Hurricane Nicholas made landfall as a category 1 storm near the eastern part of the Matagorda Peninsula, about 50 miles south of Houston, Texas around 1:30 AM EDT on September 14. Hurricane Ida made landfall near Port Fourchon, Louisiana on August 29, as a category 4 storm. Ida caused substantial damage to the electric grid in Louisiana and disrupted the oil and natural gas supply chain.

Electricity Sector Summary

- As of 8:00 AM EDT on September 23, there are approximately 16,000 power outages remaining in Louisiana due to Ida. Most outages due to Hurricane Nicholas have been restored.
- Near complete restoration for the hardest hit areas in the southeast Louisiana, including portions
 of Assumption, Lafourche, Terrebonne, and lower Jefferson parishes are expected to extend into
 the latter half of September. Utilities have encountered extensive damage that will require
 rebuilding the system. Damage to customer owned equipment must be repaired by a qualified
 electrician before utilities are able restore power.

Oil & Natural Gas Sector Summary

- As of 12:30 PM EDT, September 22, 16% of the oil production and 24% of the natural gas
 production in the federally administered areas of the U.S. Gulf of Mexico remained shut-in,
 according to estimates by the Bureau of Safety and Environmental Enforcement (BSEE). In the
 Gulf of Mexico, cumulative production loss has totaled approximately 31 million barrels of crude
 oil and 38 Billion Cubic Feet (BCF) of natural gas production.
- For the week ending on September 17, the Gulf Coast (PADD 3) had 223.9 million barrels of total crude stocks, according to the Energy Information Administration (EIA). PADD 3 crude stocks remain within the five-year range for this time of year.
- Two refineries in eastern Louisiana remain shut from Ida, accounting for about 0.5 million barrels per day (b/d) of refinery capacity, or approximately 3% of the total U.S. operable refining capacity. Seven refineries have returned to operational status after shutting down related to Ida.



DOE ACTIONS

DOE ENERGY RESPONSE ORGANIZATION (ERO): ACTIVATED - LEVEL 1

- DOE continues to coordinate with industry, interagency, and territorial partners to support response efforts related to Hurricane Ida. DOE ESF #12 subject matter experts are directly engaging with affected utilities to assess additional need to help support restoration efforts.
- DOE has worked with FEMA and industry partners to prepare for hurricane response operations during the COVID-19 pandemic.

DOE EMERGENCY SUPPORT FUNCTION (ESF) #12 DEPLOYMENTS:

- Louisiana Joint Field Office Baton Rouge, Louisiana
- Louisiana State Emergency Operation Center Baton Rouge, Louisiana



ELECTRICITY SECTOR

POWER OUTAGES

 As of 8:00 AM EDT on September 23, there are approximately 16,000 customer power outages remaining in Louisiana due to Ida.

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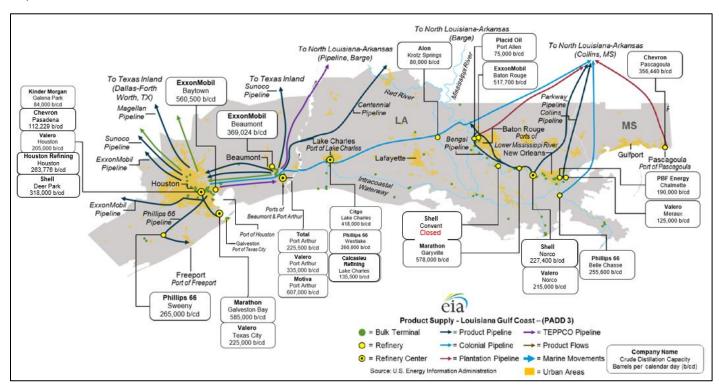


- Customer outages reflect how many electric meters are without power. Meters represent individual homes, businesses, and industrial sites.
- Industry activated mutual assistance networks, and at the peak after Ida, more than 27,000 personnel from at least 41 states and the District of Columbia were supporting Ida restoration efforts.
- Utilities typically follow an overall plan to restore service to customers. After power is restored to
 essential services and facilities critical to public health and safety, crews focus on repairing lines
 that will return service to the largest number of customers in the least amount of time. Power is
 restored systematically to neighborhoods and businesses, then to small groups of customers and
 individual homes.
- A multi-week restoration effort is expected for the hardest-hit areas in southeastern Louisiana, including portions of Assumption, Lafourche, Plaquemines, St Charles, Terrebonne, and lower Jefferson parishes. Portions of the distribution systems need to be rebuilt in these areas due to extensive damage. While full restoration may take several weeks, customers will be restored as repairs are complete.
- Some customers may not be able to receive power at this time due to damage to customer equipment and/or damage to the customer's structure. Entergy has <u>reminded</u> customers that they need to complete repairs and inspections of damaged customer owned electrical equipment before power can be restored.



OIL AND NATURAL GAS SECTOR

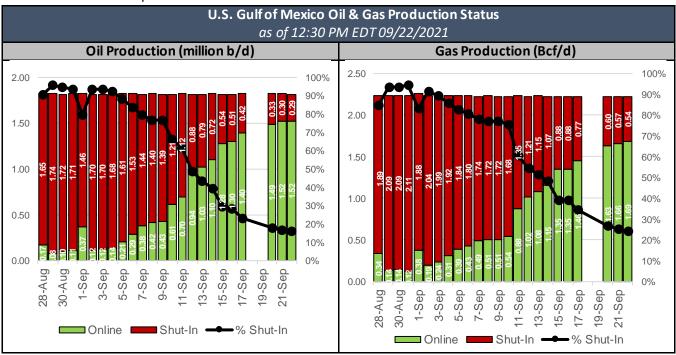
Refineries in the Texas and Louisiana Gulf Coast Refining Districts have a combined capacity of 8.6 million b/d, or approximately 50% of total U.S. refining capacity, including 1.6 million b/d in the New Orleans area and 0.7 million b/d in the Baton Rouge area. Refinery production from the Louisiana Gulf Coast is trucked to local retail stations or shipped on the Colonial Pipeline and Products SE Pipe Line (PPL) systems to high-demand East Coast markets and via tanker and barge to Florida. Refineries in the Texas Gulf Coast move product to local markets and ship on Colonial Pipeline to the East Coast and multiple other pipelines to Dallas, Texas and Midwest markets. Refineries in the Gulf Coast (PADD 3) region export approximately 20% of their production to foreign countries. This provides a significant "export buffer," allowing refiners to shift fuel production away from exports to make up for shortages in domestic markets. The map below highlights the petroleum supply chain in the Louisiana and Texas Gulf Coast region. Gulf of Mexico federal offshore oil production accounts for 15% of total U.S. crude oil production and federal offshore natural gas production in the Gulf accounts for 5% of total U.S. dry production.





OFFSHORE PRODUCTION

- As of 12:30 PM EDT, September 22, 294,000 barrels per day (b/d) (16.18%) of the oil production and 541 million cubic feet per day (MMcf/d) (24.27%) of the natural gas production in the federally administered areas of the U.S. Gulf of Mexico are shut-in, according to estimates by the BSEE.
 - Due to impacts from Hurricane Ida, some offshore crude oil production is expected to remain shut-in until early 2022.
- In addition, BSEE reports that 32 out of 560 manned platforms remain evacuated; all 11 non-dynamically positioned rigs have returned personnel; and one of the 15 dynamically positioned rigs remain out of position.



Source: BSEE – No data reported from Sept. 18-Sept. 19

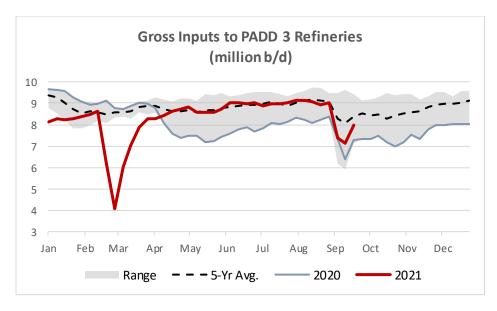


PORTS & WATERWAYS

- **Eastern Louisiana Ports:** The U.S. Coast Guard has reopened all major ports in Louisiana, Mississippi and Alabama after Ida, although minor restrictions remain in effect at several ports.
 - Louisiana Offshore Oil Port (LOOP) reports that as of September 10, it has fully reopened its
 marine operations for imports and exports. LOOP is the U.S. port capable of receiving very large
 crude carriers (VLCCs). Despite reports saying they are open for shipments, as of September 17
 Reuters reports that LOOP has yet to receive any shipments since Hurricane Ida made landfall.
 - o <u>Gulf Intracoastal Waterway (GIWW):</u> On September 10, the USCG reported that the GIWW from mile marker 18-20 west of the Harvey Locks remains closed due to shoaling.
- The **Lower Mississippi River** is open to vessel traffic with some restrictions.
 - On September 22, USCG placed daylight hour only restrictions on anchoring and sailing from the LaPlace Anchorage between mile markers 134.7 to 137.5 above Head of Passes due to a sunken barge near the anchorage.

PETROLEUM REFINERIES

- As of September 23, two refineries in Louisiana remain fully shut down, accounting for about 0.5 million b/d of refinery capacity, or approximately 3% of total U.S. operable refining capacity. Both of these refineries are expected to be shut down into October. Seven refineries have returned to operational status after shutting down due to Ida.
- As of September 17, the Gulf Coast (PADD 3) averaged 8.0 million b/d of gross inputs to refineries, according to the Energy Information Administration (EIA). This is up about 0.9 million b/d from the week prior and only 4% below the five-year average for this time of year.

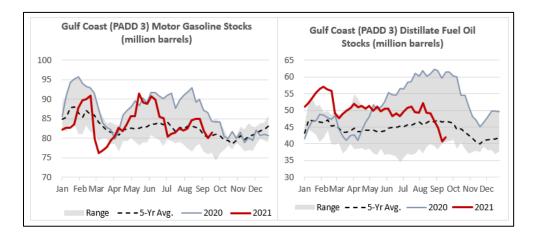


Sources: EIA Weekly Petroleum Report



FUEL STOCKS

For the week ending on September 17, 2021, the Gulf Coast (PADD 3) had 81.5 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is about 1% above the five-year average for this time of year. For the week ending on September 17, the Gulf Coast had 42.0 million barrels of total distillate stocks, according to EIA. This is 10% below the five-year average, but within the five-year range, for this time of year.



EMERGENCY DECLARATIONS & WAIVERS

EMERGENCY DECLARATIONS

To provide vital supplies and transportation services to a disaster area in the United States, emergency declarations may be issued by the President, Governors of States, or Federal Motor Carrier Safety Administration (FMCSA). These declarations trigger the temporary suspension of certain Federal safety regulations, including Hours of Service, for motor carriers and drivers engaged in specific aspects of the emergency relief effort. See 49 CFR 390.23 for the actual emergency regulation.

Emergency Declarations and HOS Waivers as of 9:00 AM EDT 09/23/2021								
State/Townitam	Details	Eff	Chahus					
State/Territory	Details	Start	End	Status				
AL, AR, LA, MS,	Regional Federal Motor Carrier Safety Administration <u>Emergency Declaration</u> (HOS Waiver)		9/28	Active				
TN, TX			9/20					
Alabama	State of Emergency & HOS Waiver	8/28	Until rescinded	Active				
Mississippi	State of Emergency	8/28	Until rescinded	Active				
Mississippi	<u>Presidential Emergency Declaration</u>	8/28	Until rescinded	Active				
Kentucky	State of Emergency & HOS Waiver	8/30	9/9	Expired				
	State of Emergency	8/26	9/27	Active				
	Presidential Emergency Declaration	8/27	Until rescinded	Active				
Louisiana	Presidential Major Disaster Declaration	8/29	Until rescinded	Active				
	State of Emergency (Nicholas)	9/12	10/11	Active				
	Presidential Emergency Declaration (Nicholas)	9/13	Until rescinded	Active				
Texas (17 counties)	State Disaster Declaration (Nicholas)	9/13	Until rescinded	Active				
Virginia	State of Emergency	8/30	9/28	Active				
Danna di ania	State of Emergency	8/31	Until rescinded	Active				
Pennsylvania	Presidential Major Disaster Declaration	9/10	Until rescinded	Active				
West Virginia	State of Emergency	8/31	9/30	Active				
	State of Emergency	9/1	Until rescinded	Active				
New Jersey	Presidential Emergency Declaration	9/2	Until rescinded	Active				
	Presidential Major Disaster Declaration	9/5	Until rescinded	Active				
	State of Emergency	9/1	Until rescinded	Active				
New York	Presidential Emergency Declaration	9/2	Until rescinded	Active				
	Presidential Major Disaster Declaration	9/5	Until rescinded	Active				
Connecticut	Civil Preparedness Emergency	9/2	Until rescinded	Active				

 $Sources: State\ government, White\ House, and\ Federal\ Motor\ Carrier\ Safety\ Administration\ websites.$



FEDERAL WAIVERS

- **FMCSA Hours of Service Waiver:** Effective September 1, the Federal Motor Carrier Safety Administration issued an extension and amendment of its <u>emergency declaration</u> related to COVID-19 response. The amended waiver includes an hours-of-service exemption for commercial motor vehicle operations across the U.S. providing direct assistance in support of emergency relief efforts related to COVID-19. The waiver specifically allows for the transportation of gasoline, diesel, jet fuel, and ethyl alcohol. The waiver will remain in effect until November 30.
- IRS Dyed Diesel: On September 15, the Internal Revenue Service (IRS) announced that, in response to shortages of undyed diesel fuel caused by Hurricane Ida and Nicholas, it extends its penalty relief for dyed diesel fuel sold or used on the highway for a number of parishes in the state of Louisiana. This penalty relief is available to any person that sells or uses dyed fuel for highway use and went into effect as of August 29. The penalty relief was extended from September 15 to September 30 and now includes the following parishes:
 - Acadia, Allen, Ascension, Assumption, Avoyelles, Beauregard, Calcasieu, Cameron, East Baton Rouge, East Feliciana, Evangeline, Iberia, Iberville, Jefferson, Jefferson Davis, Lafayette, Lafourche, Livingston, Orleans, Plaquemines, Pointe Coupee, Rapides, St. Bernard, St. Charles, St. Helena, St. James, St. John the Baptist, St. Landry, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, Vermillion, Vernon, Washington, West Baton Rouge, and West Feliciana.
- PHMSA Operator Qualifications Requirements: On August 28, the Pipeline and Hazardous Materials
 Safety Administration (PHMSA) issued a <u>Stay of Enforcement</u> to all liquefied natural gas facilities and
 interstate gas and hazardous liquid pipeline operators affected by Hurricane Ida. The Stay of Enforcement
 alerts operators that PHMSA will temporarily relax enforcement of certain regulations related to operator
 qualifications and employment drug testing requirements to remove obstacles that would prevent safe
 and rapid recovery efforts. The Stay of Enforcement remains in effect for 45 days or until rescinded or
 extended by PHMSA.
- **EPA Ultra Low Sulfur Diesel Fuel Requirements** (*Expired*): On September 7, the Environmental Protection Agency (EPA) issued a <u>waiver</u> for ultra-low sulfur diesel requirements at Port Fourchon, Louisiana, in order to address fuel supply constraints caused by Hurricane Ida. The waiver allows for the sale at Port Fourchon of higher-sulfur diesel that exceeds the 15 parts per million standard (normally reserved for ocean-going vessels) for use in any marine vessel, non-road engine, or non-road equipment. The waiver began on September 7 and expired September 16.
- EPA Gasoline RVP Requirements (Expired): On September 2, EPA issued a second waiver of Reid Vapor Pressure (RVP) requirements in Louisiana and Mississippi to help reduce fuel supply shortages as part of EPA's response to Hurricane Ida. Under this temporary waiver, regulated entities may produce, sell, and distribute higher-volatility winter gasoline in Louisiana and Mississippi with an RVP of no more than 11.5 pounds per square inch (psi) before the addition of ethanol. The waiver is effective immediately and will continue through September 15.
 - EPA's September 2 waiver superseded its first <u>waiver</u> issued August 30 which allowed for the sale
 of winter gasoline with an RVP of no more than 11.5 psi <u>after</u> the addition of ethanol.



STATE WAIVERS

- Louisiana Department of Environmental Quality Emergency Declaration: On September 22, the Louisiana Department of Environmental Quality issued a third amended emergency declaration in response to Hurricane Ida. The declaration waives certain air pollution regulations and emissions limitations related to the use, transfer, and storage of fuels, including at tank truck and railcar loading racks and marine tank vessel loading operations. The declaration remains in effect until October 30 and applies to the following parishes:
 - Ascension, Assumption, East Baton Rouge, East Feliciana, Iberia, Iberville, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, Pointe Coupee, St. Bernard, St. Charles, St. Helena, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, Washington, West Baton Rouge, and West Feliciana.
- Louisiana Expedited Fuel Imports: On September 4, the Louisiana Department of Revenue issued a <u>waiver</u> for fuel importers that expedited certain application processes and waived certain bond requirements in order to address fuel supply constraints caused by Hurricane Ida. The waiver remains in effect until rescinded.
- Louisiana State Bridge Tolls: On August 27, the Louisiana State Department of Transportation and
 Development issued a <u>Secretary's Emergency Order</u> suspending all tolls under the operation and control
 of the state of Louisiana, specifically LA 1 Toll Bridge from Leeville to Grand Isle and Port Fourchon. The
 order remains in effect until rescinded.
- Louisiana State Weight Restrictions: On August 27, the Louisiana State Department of Transportation and Development issued a Weight Restriction Waiver suspending certain vehicle size and weight restrictions in order to assist in hurricane response and recovery efforts. The waiver remains in effect through September 24 unless terminated sooner.
- Louisiana Dyed Diesel Waiver (Expired): On September 1, following the announcement by the U.S. Internal Revenue Service (IRS) that it will waive penalties for the sale or use of dyed diesel on the highway in certain Louisiana parishes, the Louisiana Department of Revenue issued a <u>waiver</u> for state-level penalties on selling or using tax-exempt dyed diesel fuel on the highway. The Louisiana waiver uses the IRS timeline and goes into effect as of August 29 and will remain in effect through September 15.
- Mississippi State Gasoline RVP Requirements (Expired): On September 1, the Mississippi Department of Agriculture & Commerce issued a waiver for RVP specifications related to gasoline and gasoline blends. From September 1 September 15, the waiver allows the sale of fuel with a Reid Vapor Pressure of no more than 11.5 psi after the addition of ethanol. The exemption to normal RVP requirements will expire on September 16. The waiver, in addition to the one issued by the EPA on August 30, is intended to allow for a greater supply of gasoline for sale in the state.

